ORGANOPHOTORECEPTOR WITH CHARGE TRANSPORT MATERIAL HAVING A VINYL ETHER GROUP

Abstract of the Disclosure

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Improved organophotoreceptor comprises an electrically conductive substrate and a photoconductive element on the electrically conductive substrate, the photoconductive element comprising:

(a) a charge transport material having the formula

$$Z = N - N - X - V$$

where R_1 and R_2 are, independently, H, an alkyl group, an alkaryl group, or an aryl group;

X is a linking group having the formula $-(CH_2)_m$ -, branched or linear, where m is an integer between 1 and 20, inclusive, and one or more of the methylene groups is optionally replaced by O, S, C=O, O=S=O, a heterocyclic group, an aromatic group, urethane, urea, an ester group, a NR₃ group, a CHR₄ group, or a CR₅R₆ group where R₃, R₄, R₅, and R₆ are, independently, H, hydroxyl group, thiol group, an alkyl group, an alkaryl group, a heterocyclic group, or an aryl group:

V comprises a vinyl ether group; and

Z comprises an (N,N-disubstituted)arylamine group, such as a carbazole group, a julolidine group, or a p-(N,N-disubstituted)arylamine group; and

(b) a charge generating compound.

Corresponding electrophotographic apparatuses and imaging methods are described.